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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/634,727 | 08/05/2003 | Jihoon Kang | KIOI:031 | 6668 |

7590 09/23/2004

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| EXAMINER | |
|---|---|
| LOUIS JACQUES, JACQUES H | |
| ART UNIT | PAPER NUMBER |
| 3661 | |

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/634,727 | KANG ET AL. | |
| | Examiner | Art Unit | |
| | Jacques H Louis-Jacques | 3661 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☒ Claim(s) *7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/2/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Abe [6,687,591].

Abe discloses a method and apparatus for controlling torque-down (discharged) upon gear changing. According to Abe, there is provided an automatic transmission (2) coupled to an engine (1). See figure 1. There is also provided an engine torque control section (6) (column 2) that controls torque outputted from said engine. Abe discloses a discharged torque (torque-down TD) of at least one of said engine and said automatic transmission (figure 1), wherein the engine torque control section controls torque of the engine according to the discharged torque (torque-down). See columns 2-4. Abe also

discloses an inertia discharged torque of the engine or the automatic transmission, wherein the engine torque control section controls torque of the engine according to the inertia discharged torque. See columns 3-4. In columns 4-5, Abe further discloses a friction discharged torque of the automatic transmission, wherein the engine torque control section controls torque of the engine according to the friction discharged torque. Furthermore, Abe discloses a revolutionary (rotating) speed of the engine, wherein inertia discharged torque produced by a rotary shaft of the engine is obtained according to the revolutionary speed of the engine. A rotational speed of an input shaft of the transmission mechanism, according to Abe, is also calculated, wherein the friction discharged torque produced by rotation of the input shaft of the transmission mechanism is obtained according to the rotational speed See column 4 and figure 4.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Mikami et al [5,672,138].

Mikami et al discloses a control system for automatic transmission, wherein there is provided an automatic transmission (3) comprising a torque converter and a transmission mechanism (figure 4, column 6) and an engine (2) connected to an input shaft of the torque converter. See figures 1-2. There is also provided an engine torque control section (figure 3) that controls torque outputted from the engine. Mikami et al discloses a discharged torque calculating means or torque down instructing means (8) that calculates a discharged torque (torque-down) of at least one of the engine and the automatic transmission (figures 1 and 2), wherein the engine torque control section controls torque of the engine according to the discharged torque (torque-down). See columns 4, 9-10. As

shown in figures 1-3 and discussed in columns 5-8, Mikami et al discloses an inertia discharged torque of the engine or the automatic transmission and a friction discharged torque of the automatic transmission, wherein the engine torque control section controls torque of the engine according to the inertia discharged torque and the friction discharged torque of the automatic transmission. The revolutionary (rotating) speed of the engine and rotational speed of an input shaft of the transmission mechanism, according to Mikami, are used to calculate the friction discharged torque. See also figure 3.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ando et al [5,496,230].

Ando et al discloses a control system for automatic transmission, wherein there is provided an automatic transmission (2) comprising a torque converter and a transmission mechanism (figures 1 and 3); an engine (1) connected to an input shaft of the torque converter (figure 1, columns 3-4); an engine torque control section (figure 1) that controls torque outputted from the engine; and discharged torque calculating means for calculating a discharged torque of at least one of the engine and the automatic transmission; and wherein the engine torque control section controls torque of the engine according to the discharged torque calculated by the discharged torque calculating means. See also figures 5-6. Furthermore, Ando et al discloses an inertia discharged torque of the engine or the automatic transmission and a friction discharged torque of the automatic transmission, wherein the engine torque control section controls torque of the engine according to the inertia discharged torque and the friction discharged torque of the automatic transmission. Also, the friction discharged torque is produced based on the

revolutionary (rotating) speed of the engine and rotational speed of an input shaft of the transmission mechanism. See figure 2, columns 5-6.

### *Allowable Subject Matter*

5. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| | | |
|---|---|---|
| 4,815,340 | Iwatsuki et al | Mar. 1989 |
| 5,103,692 | Shimanaka et al | Apr. 1992 |
| 5,403,245 | Watanabe et al | Apr. 1995 |
| 5,496,228 | Takata et al | Mar. 1996 |
| 5,916,059 | Takiguchi | Jun. 1999 |
| 6,254,508 | Kojima et al | Jul. 2001 |
| 6,406,403 | Steeby | Jun. 2002 |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H Louis-Jacques whose telephone number is 703-305-9757. The examiner can normally be reached on M-Th 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacques H Louis-Jacques
Primary Examiner
Art Unit 3661

/jlj